

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) An aqueous dispersion, comprising

(A) at least one swellable polymer and/or oligomer containing at least one functional group that is at least one of an anionic functional group, a potentially anionic functional group, and/or a nonionic hydrophilic functional group,

(B) surface-modified, cationically stabilized, inorganic nanoparticles of at least one kind, wherein the nanoparticles are modified with at least one compound of the general formula I:



in which the indices and variables have the following meanings:

S is a reactive functional group;

L is an at least divalent organic linking group;

H is a hydrolyzable monovalent group or a hydrolyzable atom;

M is a divalent to hexavalent main group or transition group metal;

R is a monovalent organic radical;

o is an integer from 1 to 5;

m+n+p is an integer from 2 to 6;

p is an integer from 1 to 6; and

m and n are zero or an integer from 1 to 5,

(C) at least one compound selected from the group consisting of amphiphiles and organic compounds which are capable of forming chelate ligands, and

(D) at least one crosslinking agent,

wherein the aqueous dispersion has a pH of from 2 to 7 and the compound of the general formula I, (C), and (D) are each different.

2. (previously presented) The aqueous dispersion of claim 1, wherein the at least one polymer and/or oligomer (A) contains anionic and/or potentially anionic functional groups, has at a pH of from 2 to 7, and has an electrophoretic mobility ≤ -0.5 ($\mu\text{m/s}/(\text{V/cm})$).

3. (previously presented) The aqueous dispersion of claim 1, wherein the at least one polymer and/or oligomer (A) contains at least one reactive functional group (S) selected from the group consisting of (S1) reactive functional groups which contain at least one bond which can be activated with actinic radiation and/or (S2) reactive functional groups which are able to undergo reactions with groups of their own kind and/or with complementary reactive functional groups.

4. (original) The aqueous dispersion of claim 3, wherein the reactive functional groups that are complementary to the reactive functional groups (S2) of the at least one polymer and/or oligomer (A) are present in the surface-modified nanoparticles (B), in the amphiphile, and/or in the at least one crosslinking agent (D).

5. (previously presented) The aqueous dispersion of claim 1, wherein the inorganic nanoparticles (B) are selected from the group consisting of main group and transition group metals and their compounds.

6. (previously presented) The aqueous dispersion of claim 5, wherein the main group and transition group metals are selected from the group consisting of metals of main group three, metals of main group four, metals of main group five, metals of transition group three, metals of transition group four, metals of transition group five, metals of transition group six, metals of group one, metals of group two, and the lanthanides.

7. (original) The aqueous dispersion of claim 6, wherein the metals are selected from the group consisting of boron, aluminum, gallium, silicon, germanium, tin, arsenic, antimony, silver, zinc, titanium, zirconium, hafnium, vanadium, niobium, tantalum, molybdenum, tungsten, and cerium.

8. (cancelled)

9. (original) The aqueous dispersion of claim 8, wherein the at least one polymer and/or oligomer (A) contains at least one reactive functional group S selected from the group consisting of (S1) reactive functional groups which contain at least one bond which can be activated with actinic radiation and (S2) reactive functional groups which undergo reactions with groups of their own kind and/or with complementary reactive functional groups.

10. (original) The aqueous dispersion of claim 9, wherein the reactive functional groups that are complementary to the reactive functional groups (S2) are present in the at least one polymer and/or oligomer (A), in the amphiphile, and/or in the at least one crosslinking agent (D).

11. (previously presented) The aqueous dispersion of claim 1, wherein the amphiphile is selected from the group consisting of monoalcohols and aliphatic polyols.

12. (original) The aqueous dispersion of claim 11, wherein the monoalcohols are selected from the group consisting of monoalcohols having from 3 to 6 carbon atoms in the molecules and the aliphatic polyols are selected from the group consisting of diols having from 3 to 12 carbon atoms in the molecule.

13. (previously presented) The aqueous dispersion of claim 1, wherein the organic compounds which form chelate ligands are selected from the group consisting of compounds containing at least two functional groups which are able to coordinate with metal atoms or metal ions.

14. (previously presented) The aqueous dispersion of claim 1, wherein the at least one crosslinking agent (D) contains at least one reactive functional group which is able to undergo reaction with at least one complementary reactive functional group (S2) present in the at least one polymer and/or oligomer (A), on the surface-modified nanoparticles (B), and/or in the amphiphile.

15. (original) The aqueous dispersion of claim 14, wherein the at least one reactive functional group of the at least one crosslinking agents (D) is selected from the group consisting of N-methylol groups, N-methylol ether groups, and alkoxycarbonylamino groups.

16. (original) The aqueous dispersion of claim 15, wherein the at least one crosslinking agent (D) is selected from the group consisting of amino resins and tris(alkoxycarbonylamino)triazines.

17. (original) The aqueous dispersion of claim 16, wherein the amino resins comprise melamine-formaldehyde resins.

18. (original) The aqueous dispersion of claim 2, wherein when complementary reactive functional groups are present in the at least one polymer and/or oligomer (A) and/or the amphiphile they are hydroxyl groups.

19. (original) The aqueous dispersion of claim 1, further comprising at least one pigment (E).

20. (original) The aqueous dispersion of claim 19, wherein the pigment (E) is selected from the group consisting of color pigments, optical effect pigments, electrically conductive pigments, magnetic pigments, magnetically shielding pigments, fluorescent pigments, phosphorescent pigments, corrosion inhibitor pigments, extender pigments, and pigments which have at least two of these properties.

21. (withdrawn) A process for preparing the aqueous dispersion of claim 1, comprising dispersing (B) the surface-modified, cationically stabilized, inorganic nanoparticles of at least one kind, (C) the at least one compound selected from the group consisting of amphiphiles and organic compounds which are capable of forming chelate ligands, and (D) the at least one crosslinking agent, and (E) optionally at least one pigment in an aqueous dispersion of the at least one swellable polymer and/or oligomer, and homogenizing the resulting mixture.

22. (withdrawn) A method comprising applying the aqueous dispersion of claim 1 to a substrate and forming one of a coating for a motor vehicle body or part, a coating for an interior and/or exterior of a building, a coating for a door, a coating for a windows, a coating for furniture, an industrial coating, a coating for plastics parts, a coating for a coil, a coating for a containers, a coating for an electrical component, a coating for white goods, or a coating for hollow glassware.

23. (withdrawn) A method comprising applying the aqueous dispersion of claim 1 to a substrate as a molding or as a self-supporting films.

24. (new) The aqueous dispersion of Claim 3, wherein the crosslinking agent (D) comprises a complementary reactive function group.